



App. No. 10/810,904

Amdt. dated April 14, 2006

Reply to Office Action of December 14, 2005

PATENT

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

8. (Currently amended) An isolated polypeptide having PhzO activity encoded by a nucleic acid molecule selected from the group consisting of:

(a) a nucleotide sequence as given in SEQ ID NO:1 from nucleotide 76 to nucleotide 1564 or from nucleotide 89 to nucleotide 1564;

(b) a nucleotide sequence encoding a polypeptide ~~having PhzO activity~~ comprising an amino acid sequence of SEQ ID NO:2;

(c) a nucleic acid sequence having at least 50% nucleotide sequence identity with SEQ ID NO:1 from nucleotide 89 through nucleotide 1564 ~~and wherein said nucleic acid sequence encodes a polypeptide having PhzO activity;~~

(d) a nucleic acid sequence encoding a polypeptide having an amino acid sequence which has at least 60% sequence identity with SEQ ID NO:2 ~~and wherein said encoded polypeptide has PhzO activity;~~

(e) a nucleic acid sequence which hybridizes under medium or high stringency conditions with the nucleotide sequence of SEQ ID NO:1 from nucleotide 89 through nucleotide 1564 ~~and wherein said DNA sequence encodes a polypeptide having PhzO activity;~~ and

(f) a subsequence of (a), (b), (c), (d) or (e) of at least 100 nucleotides wherein the subsequence encodes a polypeptide fragment which has PhzO activity.

9. (Currently amended) An isolated polypeptide having PhzO activity, selected from the group consisting of:

(a) a polypeptide having an amino acid sequence of SEQ ID NO:2;

(b) a polypeptide having an amino acid sequence which has at least 60% identity with amino acids 1 to 491 of SEQ ID NO:2;

~~(c) a polypeptide encoded by a nucleic acid sequence which hybridizes under medium stringency or high stringency conditions with (i) SEQ ID NO:1 from nucleotide 89 through nucleotide 1564; (ii) a subsequence of (i) of at least 100 nucleotides, or (iii) a complementary strand of (i) or (ii); and~~

~~(d) a fragment of (a), (b) or (c) that has the ability to convert phenazine-1-carboxylic acid to a 2-hydroxylated phenazine.~~